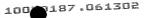
## WHAT IS CLAIMED IS:

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- A jasmonic acid carboxyl methyltransferase JMT having an amino acid 1 sequence represented by Sequence ID No. 3.
- A cDNA gene encoding jasmonic acid carboxyl methyltransferase as defined in claim 1.
- The cDNA gene according to claim 2, which contains an amino acid sequence represented by Sequence ID No. 1.
- The cDNA gene JMT according to claim 3, which contains an amino acid sequence represented by Sequence ID No. 2 (Accession No. KCTC 0794BP).
- A recombinant vector for plant transformation, which contains the cDNA gene 15 5. for jasmonic acid carboxyl methyltransferase as, defined in claim 2.
  - The recombinant vector pCaJMT for plant transformation according to claim 5, which contains a cDNA gene having a nucleotide sequence represented by Sequence ID No. 1.
    - A transgenic plant, which is transformed with the recombinant vector for plant transformation as defined in claim 5 and has an enhanced resistance against damages caused by phytopathogens and harmful insects and stresses.
  - A method for enhancing a resistance of plant against damages caused by 8. phytopathogens and harmful insects and stresses, which comprises transforming the plant with a recombinant vector for plant transformation which contains a gene encoding jasmonic acid carboxyl methyltransferase.
  - The method according to claim 8, wherein the gene encoding jasmonic acid



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carboxy methyltransferase is the gene as defined in claim 2.

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10. The method according to claim 9, wherein the gene encoding jasmonic acid carboxyl methyltransferase is the gene as defined in claim 3 or 4.

11. The method according to claim 8, wherein the damages caused by phytopathogens and harmful insects are fungal diseases, bacterial diseases, viral diseases or damages due to harmful insects.

- The method according to claim 11, wherein the damages caused by 12. 10 phytopathogens and harmful insects are blast, bacterial leaf blight, false smut and leafhopper in rice plant; scab in barley; brown spot in maize; mosaic disease in bean plant; mosaic disease in potato; late blight and anthracnose in red pepper; soft rot, root-knot disease and cabbage butterfly in Chinese cabbage and radish; bacterial blight in sesame; gray mold rot and wilt disease in strawberry; Fusarium wilt in 15 watermelon; bacterial wilt in tomato; powdery mildew and downy mildew in cucumber; tobacco mosaic in tobacco; Fusarium wilt in tomato; root rot in ginseng; angular leaf spot in cotton plant; anthracnose and gray mold rot in fruit trees including apples, pears, peaches, kiwi fruit, grape and citrus; canker in apple; witches' broom in jujube tree; powdery mildew and rust in forage crops including ryegrass, red clover, orchard grass, alfalfa, etc.; gray mold rot and wilt disease in flowering plants including rose, gerbera, carnation, etc.; black spot in rose; mosaic disease in gladiolus and orchids; or stem rot in lily.
  - 25 13. The method according to claim 8, wherein the plant to be transformed is selected from the group consisting of food crops, vegetable crops, crops for a special use, fruit trees, flowering plants and forage crops.
    - 14. The method according to claim 13, wherein the food crop is selected from the group consisting of rice plant, wheat, barley, maize, potato, red-bean, oats and African millet; the vegetable crop is selected from the group consisting of Arabidopsis,

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Chinese cabbage, radish, red pepper, strawberry, tomato, watermelon, cucumber, cabbage, melon, pumpkin, green onion, onion and carrot; the crop for a special use is selected from the group consisting of ginseng, tobacco, cotton plant, sesame, sugar cane, sugar beet, green perilla, peanut and rape; the fruit tree is selected from the group consisting of apple tree, pear tree, jujube tree, peach tree, kiwi fruit, grape, citrus, persimmon tree, plum, apricot and banana; the flowering plant is selected from the group consisting of rose, gladiolus, gerbera, carnation, chrysanthemum, lily and tulip; and the forage crop is selected from the group consisting of ryegrass, red clover, orchard grass, alfalfa, tall fescue and perennial ryegrass.

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15. The method according to claim 8, wherein the resistance against stresses is a drought resistance, a salt resistance and a cold resistance.